



# Montana Asthma Project Update: Summer 2011

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MACP Health Educator



# Recall that MAP is...

- A home-based, multi-component intervention to address asthma
- Targets children with asthma and their families
- Includes both environmental and educational components



# Evidence Base



- **The CDC's Community Guide**
  - Recommends “home-based multi-trigger, multi-component interventions with an environmental focus for children and adolescents with asthma”
  - “The combination of minor to moderate environmental remediation with an education component provides good value for the money invested”
- **Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma**
  - “Asthma education delivered in the homes of caregivers of young children be considered”
  - “Multifaceted allergen education and control interventions delivered in the home setting” be utilized for asthma patients with allergies

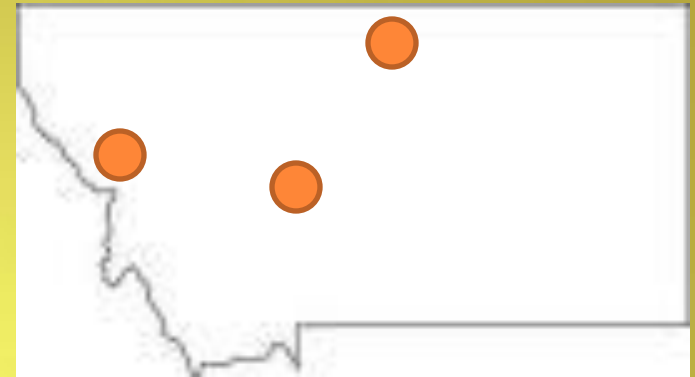


# **MAP Goals**

- 1. Increase asthma control and quality of life**
- 2. Increase knowledge of symptom management**
- 3. Increase knowledge of how to reduce and/or eliminate environmental triggers**

**Goal progress measured with knowledge surveys, symptom frequency monitoring, Asthma Control Test**

# **Home Nurse Visitors and MAP sites**



- Registered nurses will conduct the home visits
  - Chosen sites must have previous home visiting experience
  - Means of acquiring referrals
  - No special knowledge of asthma required
- Bullhook Community Health Center in Havre
- Lewis and Clark City/County HD in Helena
- Missoula City/County HD in Missoula

# Program participants

- Children (aged 0 to 17) with diagnosed asthma, and their families
  - Live in same geographic area as pilot site AND
  - Have had at least one visit to ED or urgent care or an overnight hospitalization OR
  - Scored less than 20 on the Asthma Control Test within the previous year
- Numbers?



# Six Visits/Contacts



- Initial visit, and at months 2, 4, 6, 9,& 12
- Visits at months 4 and 9 can be phone calls
- Education, symptom frequency assessment, home environment assessment for asthma triggers
- Nurse records visit data in spreadsheet to be submitted to MACP at intervals



# Training

- Two days in Helena
  - Pharmacology
  - Environmental home assessment
  - Data collection
  - Educational techniques
  - Overall program instructions

## Nurses received

- Educational curriculum and related handouts
- Durables: clipboards, flashlights, bedcovers, HEPA filters...

**EPA** United States Environmental Protection Agency

## ASTHMA HOME ENVIRONMENT CHECKLIST

Home visits provide an opportunity to educate and equip asthma patients with the tools to effectively manage their disease in concert with a physician's care. This checklist—designed for home care visitors—provides a list of questions and action steps to assist in the identification and mitigation of environmental asthma triggers commonly found in and around the home. The checklist is organized into three sections—building information, home interior and room interior. The room interior is further subdivided by categories (such as bedding and sleeping arrangements, flooring, window treatments, and moisture control). This will allow the home care visitor to focus on the specific activities or things in a room—in particular the asthma patient's sleeping area—that might produce or harbor environmental triggers. The activities recommended in this checklist are generally simple and low cost. Information on outdoor air pollution follows the checklist. The last page includes information on U.S. Environmental Protection Agency (EPA) resources and an area for the home care visitor to record a home visit summary.

If the patient's sensitivities to allergens (such as dust mites, pests, warm-blooded pets and mold) and irritants (such as secondhand smoke and nitrogen dioxide) are known, the home care visitor should begin by focusing on relevant areas. This checklist covers the following allergens and irritants, which are commonly found in homes. Information is also provided on chemical irritants—found in some scented and unscented consumer products—which may worsen asthma symptoms.

<b>Dust Mites</b> <i>Triggers:</i> Body parts and droppings. <i>Where Found:</i> Highest levels found in mattresses and bedding. Also found in carpeting, curtains and draperies, upholstered furniture, and stuffed toys. Dust mites are too small to be seen with the naked eye and are found in almost every home.	<b>Mold</b> <i>Triggers:</i> Mold and mold spots which may begin growing indoors when they land on damp or wet surfaces. <i>Where Found:</i> Often found in areas with excess moisture such as kitchens, bathrooms, and basements. There are many types of mold and they can be found in any climate.
<b>Pests (such as cockroaches and rodents)</b> <i>Triggers:</i> Cockroaches – Body parts, secretions, and droppings. Rodents – Hair, skin flakes, urine, and saliva. <i>Where Found:</i> Often found in areas with food and water such as kitchens, bathrooms, and basements.	<b>Secondhand Smoke</b> <i>Triggers:</i> Secondhand smoke – Mixture of smoke from the burning end of a cigarette, pipe or cigar and the smoke exhaled by a smoker. <i>Where Found:</i> Home or car where smoking is allowed.
<b>Warm-Blooded Pets (such as cats and dogs)</b> <i>Triggers:</i> Skin flakes, urine, and saliva. <i>Where Found:</i> Throughout entire house, if allowed inside.	<b>Nitrogen Dioxide (combustion by-product)</b> <i>Triggers:</i> Nitrogen dioxide – An odorless gas that can irritate your eyes, nose, and throat and may cause shortness of breath. <i>Where Found:</i> Associated with gas cooking appliances, fireplaces, woodstoves, and unvented kerosene and gas space heaters.

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# **Before the first visit...**

- **Sites have been gathering enrollees to the program using existing resources**
  - **Medicaid Health Improvement Program roster**
  - **Community physicians, pharmacists, other program staff**
  - **Local media**
  - **Community events**



# And now...

- Brandi Baker, RN from the Bullhook Community Health Center
- Michelle Much, RN, BSN from the Lewis and Clark City and County Health Department
- Josy Jahnke, RN, BSN from the Missoula City and County Health Department



# BULLHOOK COMMUNITY HEALTH CENTER MAP SITE

Cindy Smith, RN, BSHA -CEO of Bullhook CHC

Wendi Hulett, RN-BSN- MMHIP /MAP  
Supervisor

Brandi Baker, RN-Asthma Case Manager

# RECRUITING ENROLLEES

- ◉ Montana Medicaid Health Improvement Program
- ◉ Radio & Newspaper Ads
- ◉ Havre Public School District's School Nurse
- ◉ Community Events
- ◉ Local Clinics

# PATIENT DEMOGRAPHICS

- ◎ 32 patients enrolled in program to date
  - 20 active patients (have had at least one home visit)
  - 3 patients that dropped from program after first home visit
  - 2 patients that enrolled and dropped before first visit
  - 7 patients that are enrolled but have not had their first visit.
  
- ◎ 47% Native American, 47% Caucasian, <1% Two or more races, <1% Latino

# SUCCESSFUL HOME VISITS

- ◉ Establish rapport first
- ◉ Discuss the home assessment on the phone prior to the first visit, and again before conducting the assessment
- ◉ Start small when it comes to environmental changes

# NOTABLE FINDINGS

- ◎ Lack of knowledge of asthma symptoms
  - Most parents do not recognize coughing as a symptom of asthma
  - Discrepancy between frequency of symptoms reported by parents and patients
  - Parents tend to not take early warning symptoms seriously
  - Even parents who have asthma themselves have a knowledge deficit



# FUTURE OF THE MONTANA ASTHMA PROJECT HOME VISITING PROGRAM

- ◎ Provider/Case Manager relationships
- ◎ Follow up with younger children
- ◎ Working with schools to promote healthy school environments
- ◎ Peak flow meter use as a measurable outcome

# Lewis and Clark City-County Health Department

MAP Partner for Lewis and Clark, Broadwater,  
and Jefferson Counties

Michelle Much, RN, BSN

Home Visiting Nurse

Marylis Filipovich, LCSW

Home Visiting Program Manager

Dorothy Bradshaw

Division Administrator

# Timeline

- Recruiting and marketing began May, 2011
- Current enrollees: 7 current, 7 pending
- Plan is to have at least 10-15 enrollees by mid September

# Recruitment and Marketing

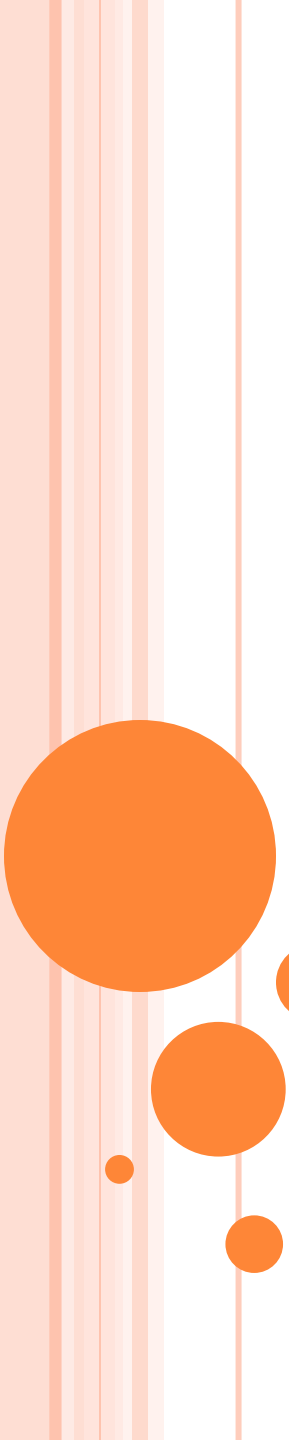
- First phase: Providers (Pediatricians, Family Practice, Allergists)
- Second phase: School nurses, community partners (i.e. Family Outreach, Head Start, etc.)
- Newspaper ads, PSA radio spot (NPR), Posters, Mailings, personal visits, call backs

# Enrollee Demographics

- 7 enrollees age 14 months to 8 years old
- 4 of 7 enrollees are considered lower socio-economic standing
- 5 of 7 enrollees are male
- All current enrollees live in Lewis and Clark county

# Notable Findings

- Parental knowledge: Fair (sometimes the kiddos know more about their asthma than the parents)
- The HEPA filters and mattress/pillow covers help significantly
- Parents are very open to all education and support (at least once the initial visit is made)



# Missoula City-County Health Department MAP Home Visiting

Josy Jahnke, RN, BSN

Home Visiting Nurse

Kate Siegrist, RN, MSN, CNM

MCH Nursing Supervisor

Julie Serstad, RN, MSN

Director of Health Services



# TIMELINE

- April 4, 2011 MAP Public Health Nurse began employment at MCCHD
- Late April recruiting for MAP initiated
- 13 children currently enrolled and about 7 potential enrollees
- MCCHD continues to recruit and accept referrals



# MCCHD RECRUITMENT PROCESS

## ○ FIRST PHASE

- Began recruitment process late April with physicians in the area

## ○ SECOND PHASE

- Missoula community involvement

## ○ THIRD PHASE

- Press release distributed to the media by Missoula Co. Commissioners Office on July 11<sup>th</sup>, 2011

## ○ FOURTH PHASE

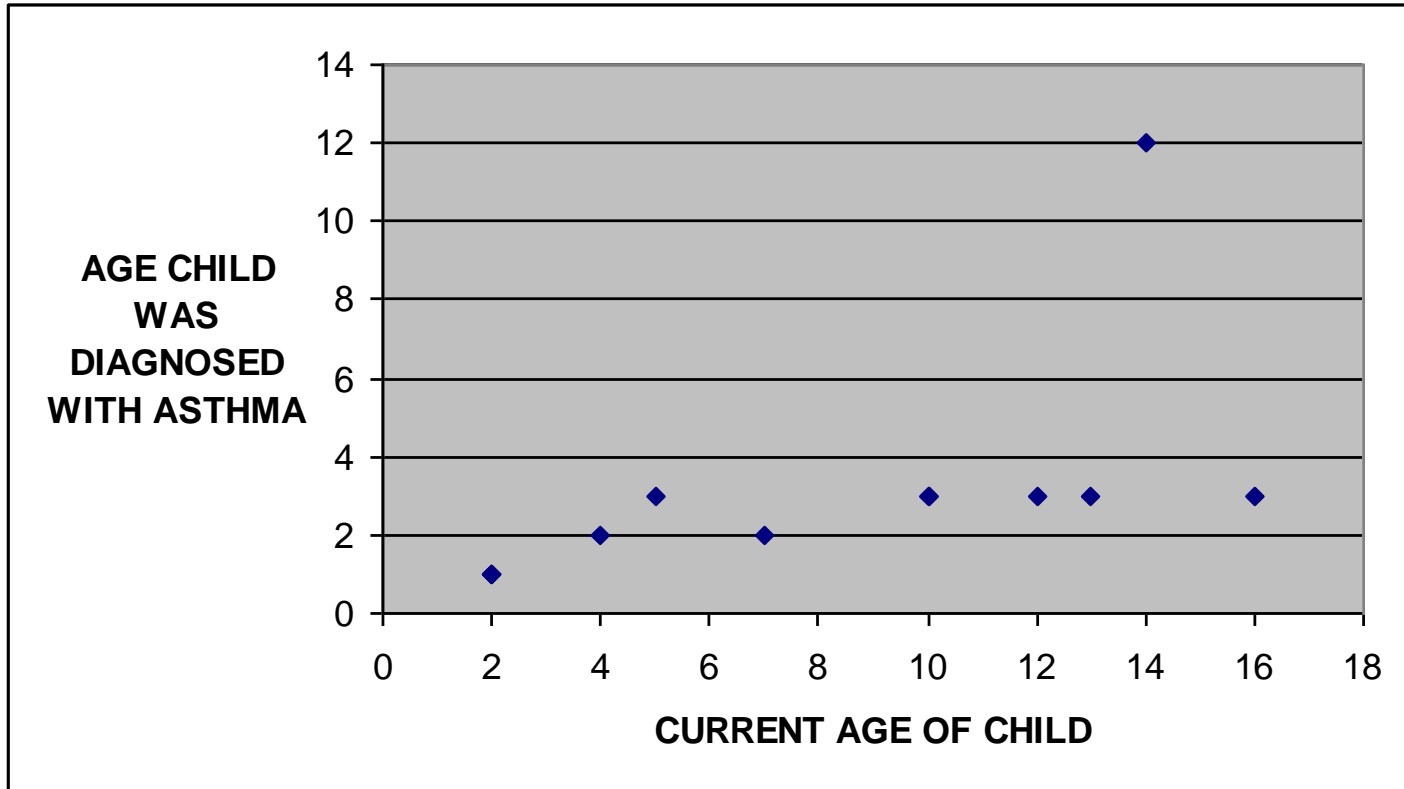
- Public advertising via MAP posters
- Direct Mailing to about 200 MHIP Clients
- Presentation to Granite Co. Board of Health and article in Philipsburg mail
- Presentation to Missoula WIC
- Head Start

## ○ ONGOING

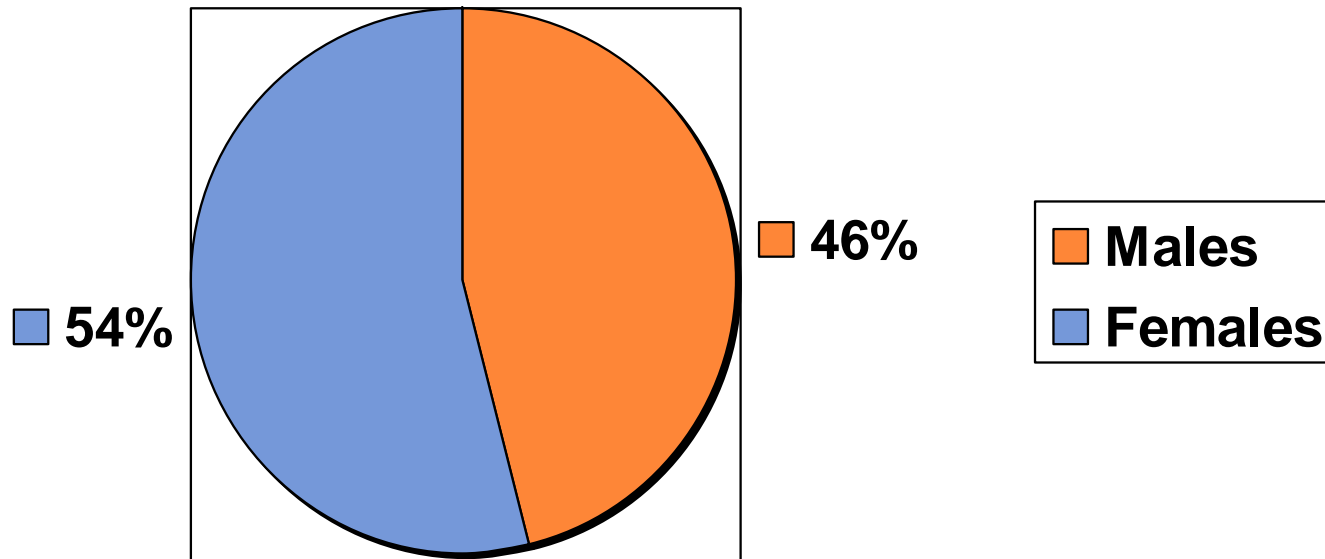
- Keep the referrals coming!!



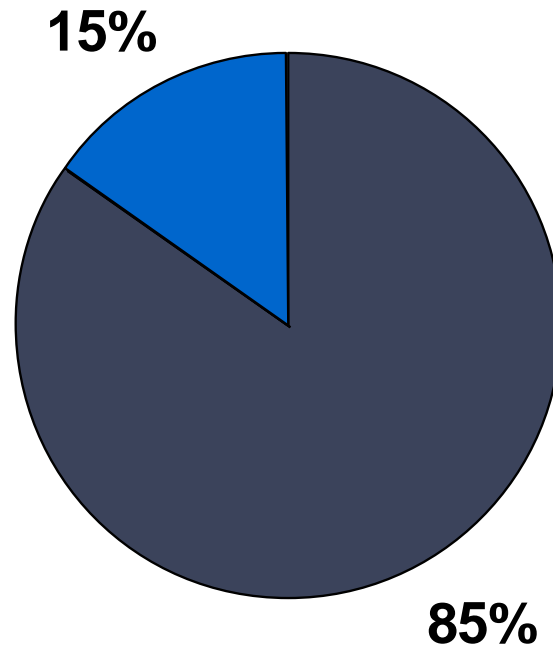
# MCCHD MAP DEMOGRAPHICS



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# MCCHD MAP DEMOGRAPHICS



-  African American/Black
-  American Indian/Alaska Native
-  Asian
-  Caucasion/White
-  Native Hawaiian/Pacific Islander
-  Some Other Race
-  Two or more races



# MCCHD SPECIFIC CLIENTS

## ○ Dust Mite Testing

- Zero positive results on all clients

## ○ Allergy Testing

- Currently 1 child tested with all results negative
- 2 different types of dust mites
- Cat
- Dog
- Feathers
- Alternaria



# CHALLENGES

- Timing of recruitment
- Seasonal findings
- No diagnosis of asthma





# NOTABLE FINDINGS:

## “WISDOM FROM THE FIELD”

- Very POSITIVE response!
  - “This has really helped put all the puzzle pieces together.”
  - “It will be nice to know what are plan of action will be.”
- Medication use
  - “It helps to know what the medications are actually used for.”
  - “I can’t wait to show my dad how to REALLY use his inhaler!”
- Long first visit
  - “Are you going to go through ALL of those pages tonight?”
  - “Can I got outside to play yet?”
- Fear of home assessment
  - “I didn’t have time to pick up my house...”
  - “Do you have to come to my home?”

